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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|---------------|----------------------|---------------------|------------------|--|
| 10/021,637 | 12/12/2001 | Laura Elizabeth Keck | 15982 | 9235 | |
| | 90 06/13/2003 | | | | |
| KIMBERLY-CLARK WORLDWIDE, INC. 401 NORTH LAKE STREET | | | EXAMINER | | |
| NEENAH, WI | | | COLE, ELIZABETH M | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | • | 1771 | | |

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | / ,] | | | | | | |
|---|---|--|---|-------------------|--------|--|--|--|--|--|
| | Application No. | | Applicant(s) | [ט | | | | | | |
| | 10/021,637 | | KECK ET AL. | 0 | | | | | | |
| Office Action Summary | Examiner | | Art Unit | | | | | | | |
| | Elizabeth M Cole | | 1771 | | | | | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover | sheet with the co | orrespondence ad | ddress | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, howev y within the statutory minir vill apply and will expire S , cause the application to | er, may a reply be time num of thirty (30) days IX (6) MONTHS from t become ABANDONED | ely filed will be considered time he mailing date of this o | ly. ommunicati | on. | | | | | |
| 1) Responsive to communication(s) filed on | <u> </u> | | | | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Th | is action is non-fin | al. | | | | | | | | |
| 3) Since this application is in condition for allowa closed in accordance with the practice under | | | | ne merits | is is | | | | | |
| Disposition of Claims | | | | | | | | | | |
| 4) ☐ Claim(s) 1-40 is/are pending in the application 4a) Of the above claim(s) is/are withdraw | | tion | | | | | | | | |
| | WII IIOIII COIISIUCIA | uon. | | | | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | | | | |
| 7) Claim(s) is/are objected to. | ☐ Claim(s) <u>1-40</u> is/are rejected. | | | | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirem | nent | | | | | | | | |
| Application Papers | , oloolion roquilon | | | | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accep | oted or b)⊡ objecte | d to by the Exan | niner. | | | | | | | |
| Applicant may not request that any objection to the | e drawing(s) be held | in abeyance. Se | e 37 CFR 1.85(a). | | | | | | | |
| 11)☐ The proposed drawing correction filed on | _ is: a)∏ approved | d b)⊡ disapprov | ed by the Examir | ner. | | | | | | |
| If approved, corrected drawings are required in rep | oly to this Office acti | on. | | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Ex | aminer. | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign | n priority under 35 | U.S.C. § 119(a) | -(d) or (f). | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | | | | |
| 1. Certified copies of the priority documents | s have been receiv | ved. | | | | | | | | |
| 2. Certified copies of the priority documents | s have been receiv | ved in Application | on No | | | | | | | |
| 3. Copies of the certified copies of the prior application from the International Bu * See the attached detailed Office action for a list | reau (PCT Rule 17 | 7.2(a)). | | Stage | | | | | | |
| 14) Acknowledgment is made of a claim for domesti | c priority under 35 | U.S.C. § 119(e) |) (to a provisiona | l applica | tion). | | | | | |
| a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti | • | | | | | | | | | |
| Attachment(s) | | _ | | | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. | 5) 🔲 🛭 | | (PTO-413) Paper No atent Application (PT | | • | | | | | |
| C D-11 | | · | | | | | | | | |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-8, 10-12, 28-29, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Midkiff et al, U.S. Patent No. 5,707,735. Midkiff discloses a nonwoven fabric comprising crimped, multicomponent, multi-lobal fibers. See figs. 3-5 and col. 5, lines 19-35 and col. 5, line 59 col. 6, line 14. The fabric may be electret treated. See col. 8, lines 31-55. The fabric may be a towel, see col. 1, lines 19-22, which implies the wiping of the towel on a surface to clean it. The fabric may be formed from a variety of fibers, including those claimed, such as polypropylene, polyethylene. See col. 6, lines 43-col. 7, line 10. The basis weight of the fabric is within the ranges claimed. See col. 12, lines 17-44.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 9, 13-20, 30-31, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff et al, U.S. Patent No. 5,707,735. Midkiff et al discloses a nonwoven fabric as set forth above. Midkiff et al differs from the claimed invention because it does not disclose the claimed

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density. Midkiff et al also does not specifically teach intermingling pulp fibers or mono-lobal filaments, or bicomponent filaments with the multilobal fibers. However, Midkiff clearly teaches at col. 12, that additional fibers having different sizes, materials etc., can be incorporated into the fabric in order to vary the properties of the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated additional known fiber materials such as pulp fibers, staple fibers, bicomponent fibers, etc. in order to obtain a fabric having the properties which the addition of such fibers would produce, such as different pore sizes, improved absorbency, and enhanced bonding. With regard to the density of the fabric, it similarly would have been obvious to have selected the density desired through the process of routine experimentation depending upon the density desired in view of the contemplated end use of the fabric, i.e., for filtration, hygiene products, toweling, etc.

5. Claims 21-27, 31, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff et al in view of Braun et al, U.S. Patent No. 4,778,460.

Midkiff et al differs from the claimed invention because although Midkiff et al teaches that the fabric may be part of a laminate, Midkiff does not teach that the second layer should comprise monolobal filaments. Braun et al teaches a fabric comprising bilobal filaments which is bonded to a second fabric. The second fabric may comprise either a circular filament or a multilobal filament having more than two lobes. See col. 8, lines 49-62. Braun teaches that having the difference in lobes in the two layers results in improved fluid transport. See col. 2, lines 12-41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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have bonded the fabric of Midkiff to a second layer comprising circular filaments as taught by Braun. One of ordinary skill in the art would have been motivated to bond the fabric of Midkiff to a second layer in order to enhance the moisture transport abilities of the Midkiff fabric, which would be particularly desirable in a towel.

- 6. Claims 32-33, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff in view Lin, U.S. Patent No. 5,280,664. Midkiff does not teach putting the nonwoven fabric onto a handle. Lin teaches that nonwoven fabrics may be affixed to handles, used and then removed and disposed of. Therefore, it would have been obvious to one of ordinary skill in the art to have affixed the nonwoven fabric to a handle in order to form a cleaning implement with a replaceable wiper. One of ordinary skill in the art would have been motivated to affix the nonwoven to a handle in order to form a cleaning implement because the use of a handle enables the nonwoven wipe to be used to clean surfaces such as floors, wall, ceilings, etc., which it would be uncomfortable or inconvenient to clean using a wiping cloth alone. It further would have been obvious to have included several cloths so that the cloths could be cleaned and to have used the cloths wet and dry because the use of cleaning cloths both wet and dry is conventional for cleaning, (i.e. dusting would be done dry while other types of cleaning and scouring are generally done with a wet towel or wipe).
- 7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff in view of Braun and Lin. Neither Braun nor Midkiff teaches putting the nonwoven on a handle. Lin teaches that nonwoven fabrics may be affixed to handles, used and then removed and disposed of.

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inconvenient to clean using a wiping cloth alone.

Therefore, it would have been obvious to one of ordinary skill in the art to have affixed the nonwoven fabric to a handle in order to form a cleaning implement with a replaceable wiper. One of ordinary skill in the art would have been motivated to affix the nonwoven to a handle in order to form a cleaning implement because the use of a handle enables the nonwoven wipe to be used to clean surfaces such as floors, wall, ceilings, etc., which it would be uncomfortable or

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole Primary Examiner

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June 5, 2003

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